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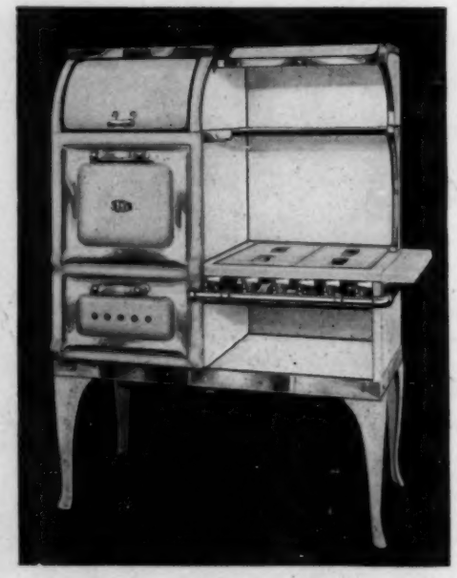

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AMERICAN
GAS JOURNAL

Vol. 124. No. 8 NEW YORK, FEBRUARY 20, 1926 Whole No. 3564

Beats the Beets and Buries the Berries

How a new use for gas developed

Jacob B. Jones

Treasurer, the Bridgeton Gas Light Company, Bridgeton, N. J.

SOME few weeks ago, while in conversation with a representative of the American Gas Journal, I ventured to suggest that there was probably no section of the country that gas was not being sold for some special reason, due entirely to the local conditions. My idea was that if the gas men would tell of their own experiences it would be of interest to the other fellow.

For instance—I do not know what part gas plays in the canning of salmon—or the roasting of peanuts —but I bet some gas man does, and being one of the ultimate consumers, I would be interested in the story.

The Beet Formerly a Minor Vegetable

The vegetable beet, which you buy in the market, was until a few years ago only considered as a garden product and raised in comparatively small lots in our section of the state. Then the canners, in extending their factory pack, started to contract with the farmers in terms of acres.

This all worked out fine for a time. The crop was easy to raise and came at a season of the year when the canner could handle them.

But the beet nearly upset the game. By nature the vegetable beet is a lazy cuss. After being carefully washed, and nicely cooked—his hide was taken off and then he was tucked away in a nice shiny tin can—and after being labeled to show that the can contained one quart of rich, red beets—he was ready for market. At this point fate enters for, after being trimmed, cooked and skinned, Mr. Beet became a "dead beat" and, being naturally lazy, just faded out into a pale, anemic-looking vegetable, and not at all inviting.

How to Beat the Beet

The farmers' problem and the canners' trouble was "How to Beat the Beet." To help matters along, the canners were also packing strawberries, and by way of contrast with the beet the strawberry is just plain T. N. T. when packed in a shiny tin container.

The strawberry has some acid in his system and when placed in a little tin can he immediately starts to emulate Mr. Houdini and do an escape act.

With his acid, Mr. Strawberry starts drilling holes in the can—and before long he makes a fairly good-looking tin can resemble a piece of well-worn window screen.

So now they had to find a plan to "bury the berry." This was all happily solved by giving the tin plate one coat of enamel on the side which would come in contact with the fruit or vegetable.

The Gas Company Enters

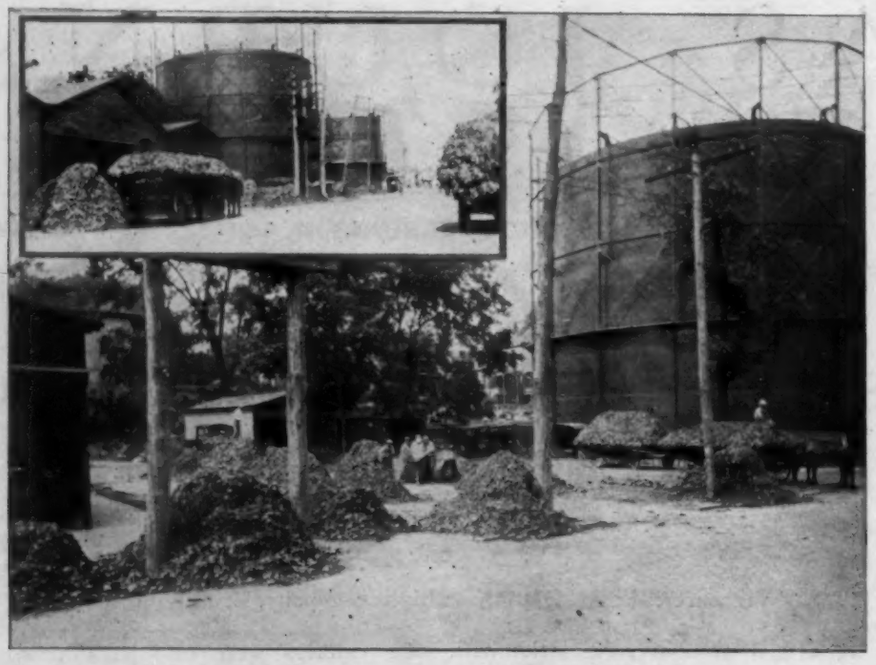
And at this point the gas company comes in. This enamel is applied on the plate in liquid form and is baked hard in an immense gas-fired oven. The sheets enter the oven wet and, after traveling the full length, come out beautifully enameled and ready to be made into the different size containers.

In the enamel can the beet holds its flavor and rich, red color—and the strawberry becomes a most likable little fellow, who is welcome at any table.

The consumer is demanding that more and more products be packed in the enamel-lined cans—and it is predicted that the plain tin can will be forgotten.

The Industry Has Grown

The farmer now brings his beets by the truck load —and the photograph gives but a faint idea of one



Enameled Cans + Beets = Large Use of Gas

factory that handles 200 tons every day throughout the season.

The ordinary tin can does not require much in the way of gas service—as there is only one seam to solder, but the enameling process requires large volumes of gas to keep the oven at the proper heat.

The can manufacturing company had just been an average consumer—now it is the largest user of gas on the lines of one company.

All because the beet would not stay beat—and the berry would not stay buried.

The People's Side*

A discussion of public relations from the public standpoint

M. S. Sloan

Chairman Public Relations Section, N. E. L. A., President Brooklyn Edison Company

PUBLIC service corporations occupy a relationship toward the public which is different from that of any other business organization. Any discussion of the relations between public utilities and the public must proceed from the basic fact that the utilities are affected with a public interest.

Our companies hold certain privileges, or grants or franchises for the use of rights or property of the public which other businesses do not enjoy. They pay for these franchises in various ways, and this use of public property is for the benefit of the public in furnishing forms of service which have come to be essential to the well-being of the great majority of people. Nevertheless, these grants come from the public; without them the public utilities could not do business, and that business, under private ownership, yields profits to individuals, as the term "profits" is ordinarily used.

Moreover, public utilities usually have exclusive rights to furnish their service within the territory for which they hold franchises. This also is for the benefit of the public and comes about by action of public authorities. Nevertheless, the utilities do have this monopoly, and it is for their business advantage.

*Address before Great Lakes Division, N. E. L. A., French Lick Springs, Indiana.

Public Expects Much from Utilities

Thus the public has given to the utilities two privileges which are essential to the carrying on of our business. It has done more for us than it does for any other class of business. It has placed us under a very heavy obligation. That is why the public expects more from us than it expects from any other business. And the public has a right to expect more and properly feels a grievance when it doesn't get more!

That is why this matter of our relations with the public goes to the very root of our business. It is why it is the most important thing in our business. The utility industry is a very wonderful industry. We who are in it and are contributing in some degree to its remarkable accomplishments, know what a wonderful part it is playing for the benefit of mankind. Just the same, there are a good many other businesses which have done remarkable things, which are doing remarkable things, and which are honestly and honorably conducted so that their existence is advantageous to the public. We may be more essential in the social and economic scheme of things than some of these others—we believe we are. But the public does not make these distinctions. It says to us, in effect:

"We have done more for you than for anybody else. We have a right to expect more from you. See that you deliver it."

Our Business Is Regulated

Because our business is affected with a public interest, the public has undertaken to say to us what we shall do and what we shall not do. It has the power and the right to do this and we of the utilities recognize the justice of the complete and strict public regulation of our industry which exists today. The public interests require an assurance that our companies will live up to the public's requirements as formulated in the laws, or be compelled to do so.

We know our companies do live up to the law's requirements. We know how much effort is put into keeping service good and rates low. The public, however, takes this for granted, and I think the public is right about that. We have no particular warrant for pinning medals on ourselves because we do what the law requires us to do, even if we do it well and it is frequently a hard thing to do.

M. S. Sloan

Must Do More Than Law Requires

We need to go a good deal further than that to have the friendly relations with the public which we desire. We must do things the law does not require us to do, but which nevertheless are as much a part of our job of public service as these other things comprehend in the laws. It is our obligation as a business which enjoys especial privileges and advantages from the public. It is our duty as public service organizations.

The public, I believe, expects us to show by our business conduct, our policies, our practices, due acknowledgment of what has been done for us. I don't think the public is unreasonable in that, and I don't think the public is unfair in what it requires. Some individuals in the public may be unreasonable. Some individuals, and some publications, may be unfair at times. But I'm willing any time, any place, to take my chance with the American people. If I can't gain their approval and bring out their co-operation after I've given them all the facts in the case as I see them, meeting them half-way—or maybe a little more—in the fairest and friendliest spirit and discussing the matter at issue with them on the basis of mutual advantage, I'm willing to admit that I'm wrong in that instance.

People Should Be Confided In

The public expects us to take it into conference about our business. This is the public's business, too, remember. The public has a stake in it. That is why the public has a right to know about it—to have its needs and interests considered and its wishes consulted. The whole difficulty in this matter of public relations has been, and still is today, that we haven't done business openly enough with the people. We have neglected them. We have been too much immersed in other features of our job. The public has been getting results from our work, but it hasn't known enough about how these results were accomplished to be able to judge their value correctly. It hasn't been brought enough into contact with us, who are really its hired hands, to be able to form a proper estimate of our worth. It sees our companies getting bigger and bigger. It reads about new issues of securities running into millions of dollars. It looks at the financial pages of the newspapers and it sees big headlines about sensational advances in the quotations for this or that utility's stock. It knows that we do business by the use of public property which it has granted to us. And that, really, is about all it does know about us. It gets suspicious.

Suspicion is a deadly thing. Back in the days when the country grist mill was more of an institution than it is now, a miller in one of his idle moments was gossiping with a lad from a near-by farm.

"John," said the miller, "tell me what you know."

"I know that miller's hogs are always fat," replied John.

"Now tell me something you don't know," said the miller.

"I don't know whose corn fattens them," said John.

The public doesn't know a lot about public utilities, and it suspects the worst.

Public Influence Paramount

We make a grave mistake any time we neglect public opinion. It is the most powerful influence there is. It makes our laws. It shapes our business affairs and may bring us prosperity or disaster. It is always at work. But because the American people are not unreasonable, and are not unfair, it is nothing for us to fear, or to hesitate to deal with. The mistake—an almost fatal error—is in hesitating to deal with it on a right and proper basis.

Abraham Lincoln once said: "With public sentiment nothing can fail. Without it nothing can succeed."

What are our companies to do to gain and hold the friendship of the public? How are they to disperse the suspicion which we know exists and put in its place favorable public sentiment?

Good Opinion Must Be Deserved

First, and fundamentally, they must deserve the good opinion of the public. Their policies and practices must conform to law and the highest standards of modern business ethics. The public expects honest dealing, good service, prompt and courteous attention to customers' needs, able employees, as low rates as possible, and expects all this as a matter of course, not because of complaints or prodding by citizens' groups and orders by public officials. If the companies fail to think well of them. Nobody thinks well of a business which isn't doing its job well and acceptably.

When the companies deserve the good opinion of the public, the way to get it, I believe, is very simple. Getting it is not so simple, because it is a complex job, a long job—a never-ending job, in fact. But our industry has never hesitated to tackle hard jobs and long jobs and it has a record of unfailing success in doing them.

Be Friendly to Gain Friends

The way to gain friends is to be friendly, and to live so that friendship is deserved. That goes just as much for public utilities as for individuals. The public utility which honestly and earnestly wants public friendship—good public relations—needs to have a friendly feeling toward people, to keep on having it and to manifest it early, often and consistently.

There isn't any profit in trying to seem friendly if you aren't. The thing to do in that case is to go into a private office and think—think hard how lucky you are that the public granted a franchise to the company; how lucky you are that the public finds electricity valuable enough so it insists on having the service; how lucky you are that capital will buy the company's securities and thus permit you to furnish the service; how lucky you are that people pay their bills and don't kick more about service and rates. After you have thought long and hard about those things you'll probably realize that people aren't so bad, after all, and maybe they'll seem better to you if you try to get closer to them.

Personal Contact Necessary

A big company in a great city, or a company serving many communities has a different condition. The principle of operations is the same, but the methods must be different. There is the same necessity for personal contact between executives and the public. In fact, there is more necessity, because the big company tends to be so much more impersonal than the small one. Yet in the big city, or in the big territory, the executives can meet and know personally only a limited number of people of all those who are their public. So they need to seek opportunity to appear at public meetings, to address civic organizations, clubs, business associations and the like to tell the utility story. They need to take part in community enterprises for civic improvement, for relief work and other philanthropic purposes. Not as a gesture, mind you. But because they are human beings, good citizens, interested both as good citizens and as official representatives of a great public service organization in things which help other people and help the community.

Proper Use of Newspapers

For the big company, contact with the public must in very large degree depend on newspapers, which are the universal means of communication. Everybody reads a newspaper—or two or three newspapers. The public utility which neglects the proper use of the newspapers in its dealing with the public will never get far in its seeking after public friendship. The importance of the news and advertising columns of the papers cannot be over-estimated. Public utilities are constantly spending money improving and extending their service. Every expenditure, every improvement, every extension of service, is news, because it affects people. It is worth something to the papers, because it is news, and they will print it because it is news, if it gets to them. And people will read it, and get a better idea of what the company means to the community. I cite this merely as an example. The operations of a public utility produce news—real news—every day, and I believe it is just as much the duty of the utility to communicate this news to the public as it is to maintain its service at a high standard. If the public does not know what we are doing in its service, how shall it judge whether we are properly utilizing the rights and privileges it has granted to us?

Advertising

Then there are the advertising columns of the newspapers. Use of them costs money—but it

doesn't cost much in consideration of what you get, which is the opportunity to talk to the entire community, to say just what you want to say, when and how you want to say it. In the advertising columns you are entitled to say how good you are—if you are. You can advertise to sell more service and different kinds of service. You can advertise to sell your company as an institution. You can tell its plans, its aims, its policies. Day after day you can lay before the people whose good opinion you desire all the facts which enter into your relations with them—the legal and economic facts which govern the rates and the standards of service; the particular problems your company meets; what is being done to solve them; what is being accomplished in serving people and in furthering the welfare of the community. If this is done honestly and sincerely, in a spirit of friendliness and with a view to serving the public interest, you will find that such advertising is read and looked forward to; that it gives your company standing as a progressive business and a true public service organization.

A spirit of true friendliness, a spirit of true public service expresses through constant contacts with the public by such means, infusing and informing the policies and practices of the utility, will win and retain the good opinion of the public. Don't for a minute think that just doing the job of operating the utility, even operating it mighty well, is enough. The spirit counts. Organizations, businesses, are known and judged and valued on that basis just as individuals are. You can't see it, perhaps you can't even define it in satisfactory words, but you know every day in our business. What we need to solve our public relations problem is more of it, all through the industry.

Ten Commandments for the Power Plant Engineer

A brief discussion of important factors in power plant operations

Russell Byron Williams

NOTICE, please, the title of this article, "Ten Commandments for the Power Plant Engineer." Not "The" ten commandments, but merely "Ten commandments." Power plant practice, unlike chemistry or calculus, cannot be reduced to a formula or equation. The ramifications are too wide completely to be embodied in ten commands. Set forth, therefore, are merely ten points which, if obeyed, will surely result in lower costs and minimized waste. They are principles which the majority have found profitable, and they should be taken as opinions of men like yourself—the result of experience.

It is well, sometimes, to stop and consider the steps possible to effect savings in the power division. Present day power generating practice is far from being perfect. In some instances, the power wasted by the industrial plant is equal to the profits of that institution. Many plants waste 50 per cent of the power generated. Almost all plants waste from 10 to 20 per cent, the ones having cut the waste to 10 per cent being on the preferred list. From whatever cause, wasting more than 20 per cent of the power generated indicates a power plant sickness extremely dangerous to the welfare of the company.

Know Your Power Costs

This is the most fundamental requirement in the elimination of waste. Power generation, in its broad sense, is a manufacturing process. Accurate, definite knowledge of costs are as important to the power plant engineer as they are to the production superintendent. Not only should the total producing costs be accurately defined, but that total should be detailed as to fuel, water, labor charges, supplies, maintenance and management.

The obtainment of clearly defined power costs is impossible except through the keeping of daily records and the analysis of performance charts. There are a number of excellent books on the market covering the keeping of power plant records with which

Know Your Power Distribution

In addition to having your power costs properly defined, the engineer should know when and where his power is going. The heat, light and power requirements of every department should be known, and those departments charged for what they use just as if the power plant were a separate organization or a public utility. To be sure, this requires complete metering, but meters are a necessary tool in the economical performance of any power plant. Without meters, definite accurate records are impossible, and in the lack of such records no engineer can hope to reduce waste or cut costs.

Unless the engineer has the status of power superintendent, he usually has little to say regarding the distribution of power to the various departments. However little he may be able to govern the actual consumption by individual departments, he is always right in demanding the installation of a meter that will record the total power used. Such record will very often indicate excess consumption and power wastes and will prove instruments unequalled for the effecting of economies or better distribution.

Know Your Fuel

Coal is steam ore. As the producer of metal must have complete knowledge of the ore to most efficiently and economically produce his metal, so must the engineer have complete knowledge of his "ore" to best produce his steam.

Annually, the Bureau of Mines at Washington issues a complete survey of all coals produced in the United States. This survey contains accurate laboratory analyses of the various coals from the many producing districts. From this survey information regarding ash content, percentage of moisture, coking properties and all other elements that enter into a tabular statement may be had. The engineer buying and using coal without the aid of these, or similar analyses, is spending his firm's money on personal judgment, which practice seldom gives maximum efficiency.

Too often purchasing departments exercise the right to buy coal on a price basis, disregarding entirely its adaptability to existing equipment and with little regard for quality. This invariably leads to decreased efficiency and ultimate increased costs. In all cases the power engineer should be the court of last appeal, not only for the fuel he burns, but for all power plant equipment. The purchasing department, so far as the boiler room is concerned, should act merely as a clearing house for detail.

Maintain Cleanliness and Good Repair

With the possible exception of the ice cream parlor, I know of no place where cleanliness will pay greater dividends than in the power plant. Cleanliness, for the power plant, means more than the mere elimination of excess grease or coal dust. It means the abolition of all dirt. Dirt—if you have never defined it—is matter out of place. Neither a newspaper, a length of hose, a wrench, a hose, three bolts, four 20d spikes, or a shovel would be classed individually as "dirt." Yet if you scatter these articles broadcast over the floor of the boiler room you will have a "dirty" floor. "A place for everything and everything in its place" may seem trite, yet it is a maxim ever new and forceful to the power plant engineer.

Cleanliness in the power plant, however, means far more than the maintenance of a clean floor, spotless gauge glasses or shiny brass. It extends to the tubes, inside and out, the firebox and the ash pit, the reservoirs and the flues. One-sixteenth inch of scale in the boiler tubes will reduce efficiency 15 per cent. A cinder one-quarter inch in diameter will plug a hole in the stationary guide and reduce the capacity and efficiency of a water-drive tube cleaner 12½ per cent.

A leaky valve or a poor steam trap will cause astonishing wastes. A dripping faucet or a switch that doesn't break the circuit can be most expensive. Noise is wear expressing itself. When an appliance is noisy—repair it, either with oil or tools. The larger wastes are more obvious. It is the little things—the jobs classed as "repairs," that are, in the long run, quite as important as the major errors.

Know Your Temperatures

Here again is seen the value of recording instruments and meters. Flue gas temperature, feed water temperature, furnace temperature—all temperatures should be definitely known at all times. There is a very definite relation between degree of temperature and percentage of CO^2. Certainly there is a distinct tie-up between feed water temperature and consumption of coal. Ten degrees of feed water temperature equals one per cent in fuel costs. Without definite knowledge of feed water temperature and its proper control, reduction in fuel consumption is impossible. Without definite knowledge of all other temperatures, and proper control of all elements of association, sustained high efficiency is impossible.

Be Able to Control Emergencies

A thousand dollars a month would be a most satisfactory salary for the average engineer. Yet the engineer receiving such a wage can save his yearly salary many times over through the ability to think quickly and accurately. In the performance of any power plant, emergencies are bound to arise. A high pressure steam main will rupture—a short circuit may develop in one of the busses—or a whole battery of motors may be suddenly and unexpectedly shut off, thus creating a great fluctuation in load. One of these emergencies, if not properly and immediately controlled, might easily delay production in one or more departments for upwards of a day. The ability to think clearly, and quickly, is a prerequisite of every power plant engineer.

Install Modern Equipment

This is the age of inventions. At no time has far-reaching improvements in the power division been brought forward with greater rapidity. So rapid is the advance of mechanical science and combustion practices that practically every large power plant, recently erected, is different from all others in some particular. It has been known that power stations, during the course of erection, have found themselves behind the most recent development in power equipment.

It is human nature, I suppose, that we hesitate to discard old equipment for new. We see in the old appliances our original investment. To us they represent some value, and that visible value blinds us to the invisible losses consequent to their continued operation. Somehow, we would rather "get along" than make the change which will cost money yet effect much greater savings perhaps not instantly apparent. This trait has blocked the progress of all peoples since the beginning and has cost modern industry untold sums in decreased production or increased overhead. And this trait, if allowed exercise in the power plant, will prove most costly, since the power plant, more than any other department, can prove a source of economy and profit or be a channel for waste.

Know How to Handle Men

The good executive is the one who can get others to perform tasks for him—properly. Ordinarily, the engineer does not have a great number of men under his direction. But on the shoulders of those few men rest the ability to either make or break the efficiency of the power plant. In no other department is co-operation and loyalty more imperative. Firemen who fail to watch the feed water—who do not obey the warnings of the CO^2 recorder—who are not greatly interested in keeping an even flow of fuel—who do not care whether the tubes are clean—who say "I should worry" when they see a crack in the fire wall or notice a leaky valve—are men who cost the company many times their salary.

Over in Europe spider webs are being transferred to gummed cards, treated chemically to harden and waterproof them, then used for trimming on women's hats. In New Jersey scientists are making hens lay five eggs a day—through the application of the ultra-violet ray. Artificial silk is now being made from spruce wood. Sawdust is being used to make a non-rot wood. In Australia, gasoline with sufficient power to drive a light motor car 42 miles on a gallon is being produced from eucalyptus oil. In Pittsburgh metallurgists have produced a new metal so hard it will turn a lathe, yet so porous it will absorb oil like a sponge. It will be used extensively for installations that have heretofore lent themselves with difficulty to lubrication. In Chicago, electricity is being generated (experimentally) by means of a windmill, while in France they have a windmill that develops 90 h.p. in a 13-mile wind.

Are you wondering what all this has to do with power plant practice? Such a tabulation of facts could be extended almost without end, and they would merely serve as added evidence that our present stage of development is not yet complete. Far-reaching improvements are being made in every line of endeavor, many of which directly affect the power producer. For instance, in Chicago a machine has been developed that will produce paper with only one-tenth the present power requirements. Think of it—a machine that cuts the power requirements of a paper mill 90 per cent! And power represents 40 per cent of paper making costs!

Because of these things we must keep abreast of the developments as they arise. We must keep in step with the times. "Where there is no vision people perish" is more true today than when first spoken for unless we are abreast of the changes rapidly taking place we will be forced to yield to those who have.

Be Constantly on the Job

No power plant will run itself. The automatization of machinery has taken long strides, but we haven't yet progressed to the point where machines will efficiently operate themselves. Power plant economies cannot be obtained unless someone vitally interested in their obtainment is constantly on the job. Eternal vigilance is necessary for the minimization of costs. Periodic inspections are necessary for the reduction of maintenance charges. The power plant engineer who would be of the greatest value to himself and his company must be on the job—all of the time.

Keep Abreast of the Times

Five years ago there were no broadcasting stations. Today there are 562 and the radio industry is providing over 250,000 persons with employment. The value of radio equipment now in use equals three-fourths the value of all the jewelry, including watches and clocks, in use in the United States. In five years the radio industry has jumped from less than one million dollars a year to well over a million a day.

Selling Better Ranges

A few pointers on how sales of more expensive ranges can be made

Frank H. Williams

SELLING a $135 range to a customer instead of the $87.50 range the customer had intended to purchase calls for real salesmanship, and yet it is being done all the time with good results in increasing the volume of business and in making customers better satisfied, because any average woman will feel much more satisfied with a better range than with a cheap one.

Of course, in selling high-priced ranges to the average homes, the big factor under consideration by the housewife and her husband is the greater price. But when payments are spread out over a period of 12 months, this difference in price does not, actually, amount to so much after all.

This point was emphasized by an alert Western gas company salesman, when he was dealing with a woman who had come to the gas company for the

purpose of buying one of the cheapest ranges the company sold. Of course, the salesman demonstrated the range the woman had in mind. Then he led her to the $135 range and demonstrated it to her very carefully and completely.

Selling the More Expensive Range

"You can see," said the salesman, "that this bigger range will do a lot more things than the smaller range will do, and just look at what a beautiful thing this range is, too."

"Yes, but think of the difference in the price," said the woman.

"You needn't worry about the difference in the price," said the salesman. "You'll hardly notice the extra amount for this better range when the payments are carried over 12 months. Let me show you just what I mean.

"Here's this $87.50 range. You make a down payment of $7.50 on this range and pay off the remaining $80 at the rate of $7 a month.

"On this $135 range you make a down payment of $15 and then you pay off the remainder at a rate of a little more than $10 a month. In other words, for just a little more than $3 a month you can get this very much better range that will be a comfort to you and a pride to you for many years.

"Don't you think it's worth the difference in price?"

This particular customer felt that it was worth the difference in price to her and so she bought the better range at once.

The Sales Argument Is Effective

Undoubtedly there is a mighty good sales thought in this idea of showing just what a big difference is made by paying just a little more each month. When a person is all set to make monthly payments of $7 or $8 for a period of a year, that person won't feel like it is such a very much harder proposition to add $2 or $3 more to these payments and get an appliance which looks just about twice as good as the appliance the person had been intending to purchase.

Another mighty good sales point in getting people to buy higher-priced ranges was advanced recently by a live wire salesman who was dealing with a man and wife.

Another Example

The couple had come into the gas office fully determined to secure the cheapest range the concern was handling, but it was evident to the salesman, as he showed the cheap range to the couple, that they were much disappointed in it. The salesman felt that in this situation there was a good selling chance for him, so he asked the couple some questions about their home and he found that they had just recently put up a fine new home, of which they were very proud indeed.

Right there, then, the salesman felt that he had the sort of a sales argument that would enable him to put over the sale of the higher-priced range.

"I know just how you feel about your new home," said the salesman. "There's hardly anything that gives so much pleasure as the possession of a spic and span brand new home. And, of course, you want everything in your home to be in perfect keeping with it.

"Have you ever stopped to think that it is the kitchen that gives the whole tone to the house? If the kitchen is equipped with all the latest and best things, and if the range is the best that can be secured, then all friends and relatives and visitors are bound to feel that the home is the best sort of a home that can be secured.

Fine Home Deserves Fine Range

"A fine new home deserves a fine new range. And when you realize that it can all be paid for easily and quickly inside of a year it doesn't seem as though it is worth while to get the cheaper range, does it?"

This argument made a deep and immediate impression on this couple, with the result that they secured the better range at once.

In the case of another enterprising salesman who, on one of his house-to-house calls, had succeeded in interesting a housewife in the purchase of a new

(Continued on page 162)

Marion Talley, the 18-Year-Old Prima Donna, Knows Well the Value of a Gas Range for Pie Baking

As The Journal Views It

PUBLIC UTILITY PUBLICITY

The public utilities, and this includes the gas companies, have been criticized at times because they did not know how to obtain proper publicity for themselves and their activities. Such criticism was, indeed, well merited in the past by some of our gas enterprises. In bygone days they certainly have considered themselves entirely apart from the public and felt that they should take no steps at all to inform their customers of their real character and of the work that they were doing for the benefit of the community at large. In adopting this attitude they simply hurt themselves much more than anybody else.

It is fortunate, indeed, that this condition has changed to a marked degree, but it still appears that such changes have not become manifest all over the country. We thus read with interest an item in a Kansas newspaper to the following effect:

"A surprising thing is the dullness of big corporations in defending themselves. Usually they are honestly managed, but without the slightest intelligence so far as publicity is concerned. With a slight rearrangement of their publicity, at no increase in expense, they might save the country from anarchy and get somewhere near justice from the people, courts, Congress and legislatures."

We hardly believe that this criticism is applicable at the present time to a great majority of utility enterprises, but it may well be true that there are certain of them that still do not appreciate the advantages of thoroughgoing publicity and do not take advantage of the benefits of publicity and of the opportunities that are offered at the present time to public service companies of the country for disseminating real accurate information regarding their activities in selling service to the public.

It must be emphasized again that such an attitude is decidedly injurious to the utility that favors such a policy. The only really effective way in which to combat the lies that are circulated regarding the public utility organizations of the country by supposedly disinterested politicians is by openly allowing the public to see everything that is being done by the utility in carrying out its business and by showing the average citizen that there is nothing whatsoever to conceal in the workings of the public service corporations, particularly a gas company.

THE AMMONIA SITUATION

The gas industry has been so long accustomed to dispose of its ammonia by-products with such little difficulty that the present developing situation in the ammonia field comes as somewhat of a shock. For the past two or three years or so there has been definite indications in the chemical field that synthetic ammonia would eventually develop into an important factor in supplying ammonia demands. According to present indications, the situation has become considerably accentuated and it now appears that in the near future synthetic ammonia will supplant the ammonia recovered in the gas works in the fields in which the latter has been used.

In a recent issue of the American Gas Journal there was published a very comprehensive review on the ammonia situation, in which both the economical and technical status of the problem was discussed. The conclusion that must be reached in this connection is simply that the gas industry must take steps to arrange to dispose of its ammonia in other ways than those that are used at present. It may be argued by some that it would be best for the gas company to convert its ammonia into sulphate or other salts right in the gas works. It must be remembered, however, that this would involve the operation of an additional process in the gas works, one that would require a certain amount of specialized technical skill. Then, again, the question of quantity of production would also be an important one. Other suggestions have been that the gas company sell its ammonia liquor to chemical plants centrally located, which would then convert it into sulphate and other ammonium salts.

No matter what disposal is made of this problem, it must be borne in mind that such a problem does exist and will make itself felt by the gas industry,

if not right now, in the very near future. It is, therefore, incumbent upon the gas companies to give this matter careful consideration, so that they may be thoroughly prepared for the change in the ammonia market that appears to be on the verge of reality.

GAS WRINKLES

U BOLT TOOL

(S. Bowman)

THE photo shown below illustrates a very practical tool made by workmen of the Western States Gas & Electric Company of Stockton for making "U" bolts. The handle "A" is put in the

vise and a double-threaded stud put under the finger "C" and behind roller "B," the roller is then swung around the pivot "D" by the handle "E," turning out perfect "U" bolts.

✡ ✡ ✡ ✡ ✡ ✡

HAND DRYER

Wrinkle No. 17

THE accompanying photograph illustrates a hand dryer, two of which were recently built by the Portland Gas & Coke Co.

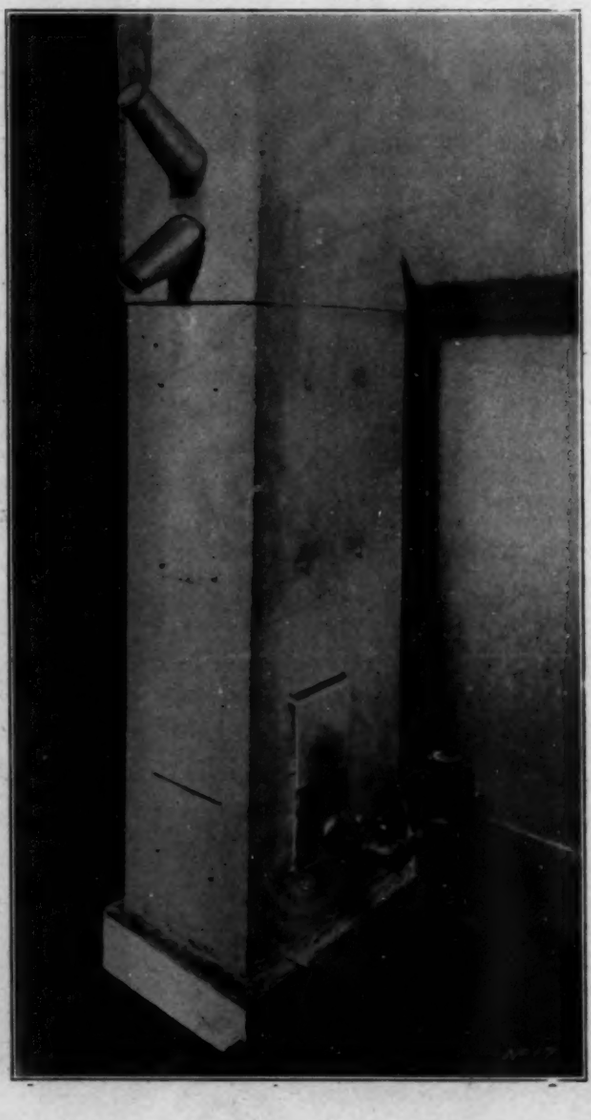
This dryer contains eight feet of cast iron, radiation supplied by a burner capable of burning 30 cu. ft. of gas per hour and thermostatically controlled.

The air supplied may be furnished in either one of two ways:

A motor and fan working in connection with each unit automatically turning on and off as the foot pedal illustrated at the bottom of the picture is operated, or as in case of the hand dryer illustrated, the motor and fan are located in a hallway and operate continuously throughout the day. A blast of air is admitted into the bottom of the dryer through a valve and which in turn is opened by means of the foot pedal. The air entering the bottom of the dryer is forced over the radiation, heated and exhausted through either one of the other of the nozzles as preferred. This preference is made possible by the use of a damper which closes alternately either one or the other of the openings.

The top opening is designed to throw air at an elevation convenient for drying the face and the bottom nozzle is designed for the hands.

These heaters have operated continuously for some four months and give every indication that such an appliance can be successfully manufactured and marketed.



GAS MERCHANDISING

Domestic – Industrial

Ideas for the Man Who Sells

William H. Matlack

THEY STILL DIFFER—BUT—? FORM YOUR OWN CONCLUSIONS

ON December 12 we had something to say in these columns regarding the attitude of John Public and time payment sales. Since that time there is not a day that passes but that some merchant does not ask: "What is to be the outcome of this time payment business?"; "Don't you think this time payment business is being overworked?" or "How are we to combat this time payment business?" Then, on the other hand, we

find newspapers, weekly magazines, trade journals, associations and individuals in all walks of life who seem to be much concerned about "this time payment business." It is for this reason that we suggest that the dealers in gas appliances give "this time payment business" some careful consideration in formulating their 1926 sales plans.

Consult your banker; talk to the industrial loan **company folks; talk to your neighbor**; ascertain just how these people feel regarding this "future mortgaging." Read Secretary Hoover's forecast! Read what Secretary Mellon had to say regarding "the tendency of the consuming public" and, if you will, read the report of commit-

tee IV. of the National Distribution Conference (this report may be obtained from the United States Chamber of Commerce, Washington, D. C.).

Give It Some Thought

Give "this time payment business" some thought. This does not means that you may desire to withhold the privilege of divided payments from your customers entirely, yet a study of the situation may divulge the fact that you will desire to shorten the period of payment, increase the amount of initial payment and monthly or weekly payments. You may likewise find that by reason of "this time payment business" some of your customers are being extended in too many different ways, because it is employed for the purchase of non-essentials, with the result they have become not as good risks as they were 12 or 18 months ago, even if the merchandise you sell has a certain resale value after recovery.

It might be well to say here that some of the gas companies have withdrawn their "nothing down" offers and others have cut the period of final purchase from 18 to 12 months and require a one-twelfth down payment with all orders.

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HOW AND WHAT TO COOK HELPS SALES

WHAT to cook and how to cook are the things the home manager is anxious to know. The "three meals a day" is a problem in every household, notwithstanding what the special writers in the Woman's Section of the daily newspaper have to say. The home manager is always anxious to learn what to cook and how to cook with the least effort or in the most efficient manner, and the advertising man in the gas industry will always find an interesting audience if he builds his advertisements with that thought in mind.

The Pacific Gas and Electric Company is publishing some very good advertisements which employ the "How" theme, as a glance at two of their recent advertisements shown on this page will indicate. These advertisements tell the home manager that "The Newer Gas Ranges are so Convenient that the Heat Regulators take the Bad Luck out of Baking." Just the things she has always wanted the cook stove to do! She does not stop here, for these are only the headlines that cause her to read the advertisement to the end and then go or 'phone the nearest gas appliance dealer.

The Laclede Gas Light Company is also striking directly at the heart of the home, and in such a way

that even the "men folks" will stop and read the advertisements. "Every Meal Requires BREAD," and then the advertisement goes on to name several varieties, including one well thought of in South St. Louis, Milwaukee and other communities where German citizens predominate. The advertisement reproduced here was designed to attract folks to the Laclede's cooking classes. Yet as you read it you can see how it will be of material aid in selling new and modern gas ranges and increasing the sendout per meter because it tells "what" to eat.

Every Meal Requires

BREAD

Our cooking experts will tell and show you how to make delicious breads in many different ways. On Monday at 2 p. m., in our Model Kitchen they will make, bake and serve

Pumpernickel
White Bread
Potato Biscuit
Popovers

These Home Service Classes at 2 p. m. every weekday but Saturday, with an Evening Class at 7:15 p. m.-on Monday, are free.

We invite you to be our guest. No charge.

Home Service Department

The Laclede Gas Light Company

Olive at Eleventh Central 3800

On the Newer GAS RANGES

Heat Regulators take the "Bad Luck" *Out of Baking*

YOU can bake beautifully *every time* with the newer improved gas ranges. Have you seen that greatest of all cookery aids—*the oven heat regulator?*

You no longer have the risk and uncertainty of guessing as to whether there is a hot or a medium heat in the oven. The heat regulator is simply "set" just as you set a clock. Then forget it. It holds the heat in the oven exactly as you want it and does away with weary watching.

Your dealer will show you dozens of other improvements—rust resisting oven lining, roll-top compartment for keeping plates and food warm, rubbish incinerator, glass oven doors, insulation to retain heat longer, easy-to-clean enameled surfaces, and many other features developed since your old stove was made.

PACIFIC GAS AND ELECTRIC COMPANY

P·G·and E·

"PACIFIC SERVICE"

309-324

ENGINEERING COUNCIL WILL STUDY UTILITIES

A nation-wide study of public utilities and various problems incident to their operation is to be made by the American Engineering Council, according to an announcement. The appointment of a committee has been completed and detailed plans for the study will be reported to the council at its annual meeting in Washington this month.

Among the questions for which answers are sought are these:

Where should Federal regulation end and state or municipal regulation begin?

What is the best policy for the regulation of superpower systems?

Should methods of regulation be written into state constitutions?

What are the best theories of valuation, of rate making and of service standards as required by state and Federal commissions?

The committee now formulating plans for the study includes Dean Dexter S. Kimball, of Cornell University, and F. J. Miller, both former presidents of the American Society of Mechanical Engineers; A. W. Berresford, of Niagara Falls, of the Institute of Electrical Engineers, and L. A. Wallace, executive secretary of the American Engineering Council.

INDUSTRIAL GAS LESSONS

IF IT'S DONE WITH HEAT — YOU CAN DO IT BETTER WITH GAS

Lesson No. 108

Combustion

Classification of Coals

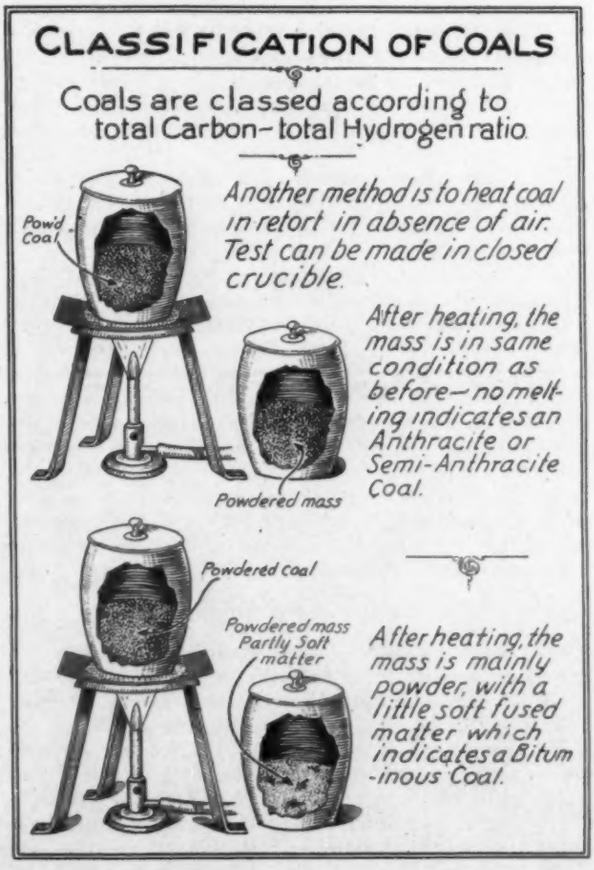
The classification of coal is important to all who have to deal with fuels of any sort. A standard classification has been worked out by the United States Geological Survey, and this is given below. In addition, other systems of classification are given, so that a comparison between them can be made:

Class	Name	Total Carbon to total hydrogen ratio (U. S. Geological Survey)	Fixed Carbon to volatile combustible matter, ratio	Per cent of total and carbon on dry ash-free sammple	General % total carbon on dry and ash-free sample
A.	Graphite and graphitic coal	Infinity to doubtful	Anth. 100 to	Anth. 95	Anth. 97 to
B.	Anthracite (1)	? to 30	12		95.2
C.	Anthracite (2)	30 to 26			
D.	Semianthracite	26 (?) to 23	12 to 8		92.5 to 87.5
E.	Semibituminous	23 (?) to 20	8 to 5		87.5 to 75
F.	Bituminous (1)	20 to 17	Bitu. 5 to 0	Common coal 82	Bitu. Eastern U. S.
G.	Bituminous (2)	17.0 to 14.4			75 to 60
H.	Bituminous (3)	14.4 to 12.5			Bitu. Western U. S.
I.	Bituminous (4)	12.5 to 11.2			65 to 50
J.	Lignite	11.2 to 9.3		70	Under 50
K.	Peat	9.3 to ?		59	
L.	Wood or cellulose	7.2		50	

The above tabulation will give a clear idea as to how the coals may be divided into several classes, ranging all the way from wood to anthracite. The classification that makes uses of the ratio of total carbon to total hydrogen in the solid fuel is the one that is most useful and the most comprehensive.

Another Classification

There is another way in which the coals can be classified and that is according to their behavior when they are heated in absence of air in the retort. This is simply another way of saying that coals may be distinguished by the manner in which they act when used for gas making by carbonization processes. Thus the coal may be characterized by the amount of gas that is produced. It may also be classified according to the character of the coke residues or to the changes that take place in the mass before the actual coke forms. Thus there are the coking coal and the non-coking coals. The tests are carried out with powdered coal samples, which are placed in a crucible and heated. For example, when anthracite coals or semianthracites are treated in this manner, they do not melt and the residual powder is of the same character as the original coal. These coals will give as much as 82 to 90 per cent of coal and contain originally from 90 to 93 per cent of carbon, 4 to 4.5 per cent of hydrogen and 3 to 5.5 per cent of


CLASSIFICATION OF COALS
Coals are classed according to total Carbon–total Hydrogen ratio
Another method is to heat coal in retort in absence of air. Test can be made in closed crucible.
Powd Coal
Powdered mass
After heating, the mass is in same condition as before—no melting indicates an Anthracite or Semi-Anthracite Coal.
Powdered coal
Powdered mass Partly Soft matter
After heating, the mass is mainly powder, with a little soft fused matter which indicates a Bituminous Coal.

oxygen. Dry bituminous coal, which burns with a long flame and which contains from 80 to 75 per cent of carbon, from 4.5 to 5.5 per cent of hydrogen and from 15 to 19.15 per cent of oxygen, when treated in the same manner will melt partly and give a residual mass which is mainly powder and a little soft matter. Such a coal is known as a non-caking long flame coal.

SELLING BETTER RANGES

(Continued from page 156)

range, the salesman put across the sale of the highest-priced range by hitting on a rather compelling argument.

"Your kitchen range is just about the most important piece of equipment in your whole home," said this salesman. "Like most housewives, you spend a very considerable part of each day in your kitchen, where you are constantly using the range or looking at it.

"So if you get a range that you get a lot of satisfaction out of owning, you'll feel cheerful every time you look at it. But if you get a range that isn't what you want, you'll be dissatisfied with it and unhappy with it every time you look at it.

Extra Satisfaction Argument

"This top-notch range I want to sell you is worth the extra effort it takes to buy it, because of the extra satisfaction and happiness you'll get out of owning it. You'll make housework easier and you'll make your days happier by owning this top-notch range instead of a cheaper range."

This particular housewife felt the same way about it, with the result that the sale of the higher-priced range was put over by this salesman without much difficulty.

The needs of a growing family would, at first thought, be considered a hindrance in the selling of a high-priced range to a young family, because there would be so many family expenses that it would be necessary to economize wherever possible.

But instead of figuring that the needs of a growing family were a drawback in putting across the sale of a high-priced range, one Western salesman actually made this factor a real help in making the sale.

To a young couple who had advanced the expenses of raising a young family as a reason for securing a cheaper range, this salesman had this to say:

Health of the Family

"Of course, you've got to consider the matter of expense nowadays, but, more important than expense, is the health and good constitutions of your youngsters. In bringing up youngsters, heat is always tremendously important. You've got to heat water and milk and cloths quickly and you've got to have sufficient equipment with which to do this. Now, you've got quite a family, your old range isn't adequate, and that's the reason you're contemplating purchasing a new range. So while you're making the purchase, why not get a big enough range to take care of all your present and future needs? By getting the right range now you'll be saving money in the long run because the range I want to sell you will be plenty big enough for all needs and you won't have to buy another range for a long time to come."

And this sale was made, too.

Undoubtedly there are worthwhile ideas and suggestions in all this which could be used to good advantage by other gas appliance salesmen in putting across the sales of the highest priced ranges carried by their establishments.

GAS POISONING AND ASPHYXIATION INVESTIGATION

A report has been made by a technical sub-committee to the mayor's committee of the city of Los Angeles, Calif., on the investigation of gas poisoning and asphyxiation resulting from the use of gas heating appliances in Los Angeles and vicinity.

This report is a very complete and comprehensive study of the entire question from various standpoints. Attention is paid, not only to detailed records of the various asphyxiations reported in the aforementioned city during the winter of 1924-25, but also to the physiological effects of carbon monoxide poisoning, to detection, methods and treatment of poisoning, to the composition of gas supplied, to the conditions under which it is used, as well as to the methods employed for testing and inspecting gas-heating appliances in Los Angeles in order to determine safe conditions of use. Results of investigations in other cities and researches by the Bureau of Mines and Bureau of Standards, relating to gas hazards, are also gone into in detail.

Among the conclusions reached as a result of the investigations were that the sale and installation of gas equipment should be regulated more fully than is provided in the existing city building ordinances and that the new form of ordinances should provide that all gas appliances sold in the city must be registered with and tested and approved by the Board of Public Utilities; that all dealers must have a license to sell gas appliances; that gas installation work be limited to properly qualified and examined workmen; that existing gas installations be inspected for safety; that gas vents and ventilation ducts and connections be installed; that instructions be compiled for appliances, installations and adjustments.

The membership of the committee is as follows: George L. Metcalf, engineer, Los Angeles City Board of Public Utilities; C. C. Shoemaker, engineer, Los Angeles City Board of Public Utilities; Louis Mellinkoff, Merchant Plumbers Association of Los Angeles; Walter M. Berry, executive engineer, California Gas Research Council; R. M. Conner, research engineer, Pacific Coast Gas Association; H. L. Masser, chairman, gas engineer, Los Angeles Gas and Electric Company.

PROGRESS IN GAS TECHNOLOGY
Domestic and Foreign

CONSTRUCTION AND WORKING DRY PURIFICATION BOXES

IN an interesting article on this subject which appeared in the Gas World, December 19, 1925, pages 599 to 560, there were given a number of suggestions relative to the construction and operation of iron oxide purification boxes.

Attention was paid to the continuous partial revivification of the oxide in the box. Three general points of admission and method of admission of air were described, as follows:

1—Drawing in the air at the inlet by the exhauster.
2—Injection of the air after gas is past all washers and scrubbers by means of a steam injector.
3—Forcing the air into the gas screen near the main inlet to the purifiers by means of a fan or exhauster.

Another important point discussed was temperature control. It was stated that present practice seems to favor having the oxide in a slightly acid condition and at a fairly high temperature. Three general methods of imparting heat to the oxide are as follows:

1—By means of enclosed steam coils in the bottom of the purifiers.
2—By the admission of a wet steam into the gas stream at a distance from the main inlet to the purifiers after the gas has passed the scrubbers and washers.
3—Employment of some sort of a heat exchanger.

A great drawback to the first method is the corrosion of the steam coils, while in the second method large quantities of offensively smelling water are produced. The third method appears to be the best.

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CARBONIZATION TESTS IN CONTINUOUS VERTICAL RETORT

A NUMBER of experiments have been carried out in Australia with a continuous vertical retort and these have been described in an article which appeared in the Journal of the Society of Chemical Industry, 1925, pages 519 T to 525 T.

The purposes of the investigation are as follows:

(1) The investigation of the possibilities of using graduated temperatures on the retort setting so that while the tar oils were driven off under low-temperature carbonization conditions at the top of the retort, the gas yields could be increased by subjecting the coke to medium or high temperatures in the lower part of the retort.

(2) The investigation of the effect of circulating coal gas, after scrubbing for tar and ammonia, upwards through the retort, (i) on the rate of carbonization and, therefore, throughput of the retort, (ii) on the yields and quality of the tar oils, ammonia, gas and coke.

(3) The investigation of the yields of motor spirit, naphtha, and fuel oil to be obtained by distillation of the tar and from the gas, by oil-scrubbing under these conditions.

(4) The investigation of the retort as a gas-making unit.

Complete details of the operation of the plant, methods used for measuring production of gas and various by-products, as well as for analyzing the various products obtained, are given in the original article.

The general conclusions which were arrived at from these experiments are as follows:

(a) Carbonization in vertical retorts with both external and internal heating and the effects of gas circulation through the retort, using a strongly caking coal were tested.

(1) The coke leaves the coke chamber in a cool condition without steaming or spraying.

(2) The throughput for the temperature conditions investigated increases by nearly 60 per cent.

(3) The gas off-take temperature increases.

(4) The yield of tar increases.

(5) No diminution of the calorific value of the gas could be observed by spot tests on a Simmance-Abady total heat calorimeter whether the circulation gas exhauster was working or not, provided the temperatures at the bottom of the retort were not very high. It was, therefore, concluded that the decomposition of gaseous hydrocarbons by hot coke up to 800 degrees is either inappreciable or quite slow.

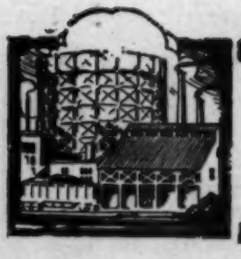
(6) The coal cokes across the whole section of the retort within about four feet from the top. The result is that poking down is necessary for some minutes in every half hour to keep the charge traveling. Channelling occurred and sometimes as much as 3 in. w.-g. pressure would show on the base of the retort. Vigorous poking down removes this.

(7) Heating internally with inert gases greatly increases tar fog and makes complete precipitation of tar more difficult and therefore expensive. Electrical precipitation above the dewpoint of the associated water vapor would probably meet the situation.

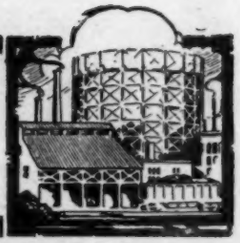
The general conclusion to be drawn is that the mechanical difficulties due to sticking of the charge with caking coals makes this means of increasing throughput unsuitable to narrow retorts, which are also externally heated. This difficulty would no doubt disappear with a non-caking coal and could probably be overcome by a proper blending of suitable caking and non-caking coals.

As a result of this investigation, however, the authors feel very favorably impressed with the possibility of internal heating alone at moderate temperatures by preheated retort gas in wide retorts.

(b) The performance of the retort for gas making purposes at high temperature compared favorably with established types for economy of operation and evenness of work.



NEWS OF THE GAS INDUSTRY



New York Gas Men to Meet

The annual meeting of the gas section of the Empire State Gas and Electric Association will be held at the Hotel Van Curler, Schenectady, N. Y., on Wednesday, March 3rd, and Thursday, March 4th. The first session, which will start at 9.30 a. m., Wednesday morning, will open with an address of welcome. Then the following three papers will be presented:

1. Gas Main Joints. W. C. Sykes, engineer of distribution, Rochester Gas & Electric Co., and J. R. Crowell, superintendent of distribution, Westchester Lighting Co.

2. Protection of Wrought Iron Pipe. Joseph Lucena, superintendent of distribution, Syracuse Lighting Co.

3. Gas Demand Meters. D. McDonald, general superintendent, American Meter Co., New York City.

In the afternoon sessions the following papers and addresses will be read:

1. Coke. Donald McArthur, Seaboard By-Products Co., Jersey City, N. J.

2. Holder Paint Discolorations. C. A. Lunn, chief chemist, Consolidated Gas Co., New York City.

3. Motor Fuels. R. Kruger, chemist, Rochester Gas & Electric Co.

4. Rotary Displacement Meters. J. Eberle, engineer, Municipal Gas Co., Albany, N. Y.

Topics for additional discussion will be:

1. Consumers' Meter Troubles.
2. Bituminous Generator Coal.
3. Waste Heat Boilers with Back Run.

At the morning session on Thursday the following papers and addresses will be read:

1. E. C. Scobell, president, Empire State Gas & Electric Association, Rochester Gas & Electric Co.

2. Uses of Gas. H. O. Loebell, vice-president, Combustion Utilities Corporation.

3. Gas Refrigeration. N. T. Sellman, engineer of utilization, Consolidated Gas Co., New York City.

4. Water Heaters. Victor Starzenski, district manager, Adirondack Light, Heat & Power Co., Schenectady, N. Y.

5. House Heating. W. Hoyt, secretary, Rochester Gas & Electric Co.

The afternoon session will be devoted to a visit to the Troy Coke Oven plant.

Contracts for 50 Exhibit Booths Let

Own Your Own Home Exhibition Is Scheduled for Week of March 27 to April 3

Chicago, Ill.—Contract for more than 50 exhibit booths has been made by the gas appliances committee of the sixth annual Own Your Home Exposition, to be held in the Coliseum, March 27 to April 3, under the auspices of the Chicago Real Estate Board.

C. A. Luther, assistant general manager of the Peoples Gas Stores, is chairman of this exposition committee in charge of assembling exhibits to show the importance of this utility in the modern home. Other members of the committee include:

W. A. Framke, Reliable Stove Co.; Ernest Martin, George M. Clarke Co.; C. O. Frary, General Appliance Sales Corp.; A. T. Wallace, General Gas Light Co.; C. E. Bartenbach, A. B. Stove Co.; W A. Smith, Cribben & Sexton Co.; J. Ratcliffe, Michigan Stove Co.; H. Dummett, Humphrey Co.; Reid Cameron, Lovekin Water Heater Co.; Fred Rix, Eureka Water Heater Co.; Harry D. Schall, Baltimore Gas Appliance Co.; Frank Coulter, McDougall Co.; John Toomey, Rathbone Sard Co.; E. J. Caspers, Chicago Gas Appliance Co.; Raymond Hurley, Hurley Machine Co.; W. E. Derwent, George D. Roper Co.; William T. Rasch, A. H. Wolff Gas Radiator Co.; Fay Grow, Time-O-Stat Co.; W. L. Thompson, Columbia Heating & Ventilating Co.; George Knapp, Pittsburgh Water Heater Co., and Arthur Friedman, Cleveland Heater Co.

U. G. I. Gas Lease Signed—Contract Begins in 1928

Philadelphia, Pa.—Mayor Kendrick of Philadelphia has signed the agreement between the city and the United Gas Improvement Company for operation of the gas works starting January 1, 1928.

Terms for a new contract, to supplant the present lease, which expires December 31 of next year, were approved unanimously by Council, previously having been agreed to by U. G. I. representatives and the Municipal Gas Commission. The existing $1 per thousand cubic feet retail rate will be continued initially under the new pact and future price fixing is placed in the control of a permanent commission, which will raise or lower the rate, depending on the cost of production.

The agreement, signed by the mayor and Samuel T. Bodine, president of the U. G. I., will be presented to the Public Service Commission for approval.

Under the terms of the lease the city will receive $4,200,000 annually and the company will get $600,000 as a management fee.

Lynn Gas & Electric Opens New Quarters

Lynn, Mass.—The Lynn Gas & Electric Company has moved to quarters which consist of a very handsome and substantial building in the main section of the city of Lynn. The company has the good will of its community as may be gathered from the comprehensive story that appeared in one of the leading newspapers of that city, in connection with this event.

It is said that the new building affords ample space for the display of gas appliances in the display room, which is located on the ground floor. There, distributed in different sections, are groups of heaters, refrigerators, household and laundry equipment of all kinds, as well as modern gas fuel furnaces, steam, hot air and vapor heaters. There is also a complete display of gas, hotel and restaurant appliances.

It is to be noted that the Lynn company has been giving 73 years of service, which the people of Lynn have designated to be "excellent."

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George McDermand Honored

George McDermand, manager of the Crown tar department of the Public Service Company of Colorado, has been elected a member of the board of directors of the Colorado Manufacturers and Merchants Association. He has been a member of the association for a number of years and was one of the first men to color incandescent lamp bulbs. He is an expert chemist and knows his dyes.

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F. H. BEEBE IS PROMOTED

Elected Vice-President of Western Gas Construction Company

Fort Wayne, Ind.—F. H. Beebe was elected to the vice-presidency of The Western Gas Construction Company plant here at a meeting of the directors, held in Pittsburgh recently.

Mr. Beebe has been in full charge of the business since November of 1917, when The Koppers Company of Pittsburgh took over the business.

All officers of the company with the exception of Messrs. Beebe and Marquardt are located in Pittsburgh.

Pacific Coast Gas Men Meet in San Diego

The Pacific Coast Gas Association held a meeting in San Diego, Calif., on February 18 and 19, 1926. The program of the meeting was as follows:

Thursday, February 18

2:15 p. m.—Committee conferences, San Diego Hotel; accounting section, commercial section, public relations section, technical section.

4 p. m.—Meeting of appliance certification committee.

8 p. m.—Joint meeting of board of directors and section chairmen.

Friday, February 19

9 a. m. to 11:30 a. m.—General meeting, San Diego hotel.

11:30 a. m. to 3 p. m.—A long adjournment to give an opportunity to visit the gas plant and offices of the San Diego Consolidated Gas and Electric Company.

3 p. m. to 5 p. m.—General meeting, San Diego Hotel sun parlor.

6:30 p. m.—Get-together dinner, San Diego Hotel, Pompeian room.

The program of the general meeting was as follows:

Friday, Feb. 19, Morning Session

9 a. m. to 11:30 a. m.—Preliminary remarks, President F. J. Schafer; a discussion of the natural gas engine business in Southern California, F. M. Banks, Southern California Gas Company; discussion; possibilities of the Orange Star Sales Campaign, C. M. Grow, Southern California Gas Co.; discussion.

Afternoon Session

3 p. m. to 4:30 p. m.—Economy Effected by Using Variable Speed Motors for Centrifugal Gas and Air-Boosters, H. J. Smith, Pacific Gas and Electric Company; discussion; High Pressure Gas Regulation, Otto Goldkamp, San Diego Consolidated Gas and Electric Company; discussion; Applied Public Relations, Don Ray, Pacific Gas and Electric Company; discussion.

Companies Consolidate

LaDow Gas Co. and Fredonia Gas Co. Combine

Fredonia, Kansas—The Fredonia Gas Co. and the LaDow Gas Co. have announced that the gas transportation and sales of each company are to be consolidated and the reorganized company will be known as the Fredonia Gas Line Co. and will serve not only Fredonia, but the various industrial plants.

The gas supply of Fredonia has for several years past been purchased by the Fredonia Gas Co. from the LaDow Gas Co., which has also served the industrial consumers of Fredonia.

The owners of the Fredonia Gas Co. and the LaDow Gas Co., having recently adjusted their holdings until the ownership has been practically identical, the new organization is formed to unite the transporting and sales organizations into a single gas service unit.

In this action is seen one of the direct results of the favorable business outlook for 1926. This case being one in which it is evident that plans are made not only for more efficient and economical service, but to form a balanced and adequately financed unit, capable of any expansion that Fredonia and its industries may require.

The rumors that have been heard since the beginning of the necessary appraisal, audits, etc., may be set aside we can announce that the ownership is changed only in so far as required in the adjustment of the ownership interests, and that C. V. LaDow will continue as president and general manager and H. A. Galligan as secretary-treasurer.

There will be no change in rates for domestic gas. The LaDow Gas Co. as drilling contractors will continue with offices with the Fredonia Gas Line Co., and R. F. Wyant as superintendent.

The Portland Gas & Coke Co. also completed a major program with the investment of more than $1,000,000 and announced a further expansion program of more than $2,507,000 for the coming year.

The gas company customer list expanded 5 per cent during the past year and preparations have been made for an increased consumption of this commodity amounting to 10 per cent or more in 1926.

Large Holder Erected

During the year the gas company erected a new 3,000,000 cubic foot holder at Eighth and Clinton streets and installed two new generators, increasing gas production 20 per cent. Boilers and compressors were added to the main plant and huge 24-inch transmission mains were laid from the main plant to 24th and Nicolai streets.

American Gas Association Meritorious Service Medal

Attention is called to the fact that applications for this medal covering deeds performed during the calendar year 1925 must be received at the headquarters of the association, 342 Madison avenue, New York City, on or before March 1, 1926. Conditions governing an award of this medal, together with application blanks, can be obtained from the association.

Home Service Activities at the Brooklyn Union Gas Co.

Brooklyn, N. Y.—This company has paid special attention to the home work and the activities of the home service division of the company has been and is still attracting enthusiastic groups of customers. One new development was the opening of a junior class for girls between the ages of 11 and 14, at one of the branch offices. This class has proven to be very popular and those who have attended are so interested that they have taken it upon themselves to bring in other members to the class. It is now under consideration to establish a program of home service demonstrations for the women employees of the company. There have been many requests made for such a class.

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Allegheny Co. Asks Franchise

Buckhannon, Penna.—Action on the petition of the Cumberland and Allegheny Gas Company for permission to furnish artificial and natural gas in the lines here was asked of the city council. No action was taken, it being decided to ascertain through civic organizations the sentiment of the city before acting.

Gas Works Spend $400,000 on Plant

Binghamton Corporation Plans Greatest Program of Expansion and Improvement in Its History, Says Gen. Mgr. Bennett

Binghamton, N. Y.—One of the greatest construction programs in the history of the Binghamton Gas Works, calling for the expenditure of $400,000, is announced for 1926 by the vice-president and general manager, Charles E. Bennett.

Bennett also expressed his satisfaction that the public of Binghamton subscribed for the new issue of $100,000 in 6½ per cent stock within three days.

The 1926 budget provides improvements for the plant on Court street, near the Tompkins street bridge, and the system in Binghamton and Johnson City. Its largest item is a new city storage holder, with a capacity of 3,000,000 cubic feet. The old holder holds 750,000 cubic feet, but the growth of the community and the demands upon the company make the increase necessary.

The new holder, like the old, will be constructed of steel, and will rise, under the pressure of the gas as it is pumped into the holder, to a height of 195 feet. The tank will be 160 feet in diameter. Construction will start late in March or early in April, by the Bartlett-Hayward Co. of Baltimore, and it will be turned over ready for use on November 1 next. Its cost will be about $260,000.

In addition, a large boiler will be rebuilt and improved with latest equipment, calling for an outlay of $10,000.

A new station meter will be installed at an expenditure of $6,000 for measuring the gas as it goes from the plant into the mains. Many pipes will be laid and relaid in and about the Court street plant in connection with the erection of the new boiler and pipes also will be used in other parts of the city, all calling for an expenditure of $6,000 or $7,000.

Six miles of new mains—a little more than was laid last year—will be laid through the city and Johnson City.

About $13,000 will be spent in improvement of the present distribution system in the city, in the replacement of small mains and the improvement of service conditions.

About $10,000 will be spent on new service pipes extending from the street to the house of the consumer.

New meters and their connections will call for an outlay of $27,000.

Hartley Walker Elected President of Pittsburg Water Heater Co.

At a meeting of the board of directors of the Pittsburg Water Heater Company, Pittsburgh, Pa., January 20, Mr. Hartley Walker was elected president of the company to succeed Mr. F. H. Knapp.

Mr. Walker attended the Sheffield Scientific School and graduated from Yale in 1919. Upon graduation he entered the wholesale drug business at New Brighton, Pa., and later became superintendent of W. & H. Walker, manufacturing chemists. On January 1, 1923, he entered the employ of the Pittsburg Water Heater Company as production manager and in March, 1925, was elected vice-president. During his tenure of office as vice-president, Mr. Walker paid particular attention to sales.

Reports of Public Service Commissions

The Public Service Commission of West Virginia has acted on an application for authority to change the rates of natural gas as made by the Pittsburgh and West Virginia Gas Co., and has ordered that this application for a change and increase of rates be denied.

The commission has decided in a similar manner in the application made by the West Virginia Utilities Co.

In the case of Keener's Oil, Natural Gas and Fuel Co. application for authority to change rates for natural gas the commission has decided as follows: First, that the aforementioned company be permitted to charge the following rates:

Fifty-two (52c) cents per thousand cubic feet, less a discount of two (2c) cents per thousand cubic feet if payment be made within a discount period of 10 days. Minimum charge one ($1.00) dollar per month for each consumer.

On an application made by the company to reopen the case, the final decision was made to the effect that a service charge of 50 cents should be allowed after the company had been taken over by the Hope Natural Gas Co. (Complete description of these cases may be obtained in the original publication from the West Virginia Public Service Co.)

Northern Indiana Gas Companies Merge

Petition Filed with Indiana Public Service Commission

Merger of the Northern Indiana Gas and Electric Company into the Northern Indiana Public Service Company, until recently called the Calumet Gas and Electric Company, is proposed in a petition recently filed with the Indiana Public Service Commission at Indianapolis.

Operating revenue of the two companies last year aggregated in excess of $10,000,000. Their combined capitalization is $44,928,000.

Upon completion of the merger, the combined properties will be operated under the name of the Northern Indiana Public Service Company. Both companies now operate in the same general territory in Northern Indiana and the proposed merger will permit the development and financing of the properties to better advantage.

The number of communities served by the Northern Indiana Public Service Company, after the merger, will be 119. The number of customers supplied with gas by the two companies at the close of 1925 was 119,091, and 58,430 customers were supplied with electricity. Twenty-five counties with a population of 560,000 will be served by the one company after the consolidation.

Common and Class A preferred stock of the Northern Indiana Gas and Electric Company will be converted into common and preferred stocks of the Northern Indiana Public Service Company, share for share.

The advantages to the public served and to the investors, owning securities in the companies, by the merger are outlined in the joint petition which is signed by officers of both companies.

"The proposed merger will operate in the interest of the general public served by said petitioners both with respect to service presently rendered and its less immediate effect upon the general growth and development of the communities served," says the petition. The territories occupied by petitioners are identical and are in other instances adjacent or neighboring. Together they comprise a large proportion of the northern part of the state, extending from the Illinois to the Ohio state lines.

Under a unified management, physical interconnections of the respective properties can be made with a minimum of difficulty and delay, resulting in increased efficiency and dependability of service.

By the creation of a single strong operating company the advantages and economies of centralized generation of electrical energy can be more fully utilized and the extension of electrical service to rural communities further developed. Generating stations can be established at those points where sufficient supplies of water for condensing purposes are available in conjunction with adequate transportation for fuel, for the benefit of less favored localities.

The merger of the companies will result in a more diversified business. Revenue of the Northern Indiana Gas and Electric Company derived from the sale of gas amounts to 53.68 per cent of its total operating revenue. Revenue from the sale of electricity is 44.78 per cent and 1.54 per cent is procured from the sales of water and steam heat. At the present time 23.70 per cent of the revenue of the Northern Indiana Public Service Company is derived from the sale of gas, 76.12 per cent from the sale of electricity and .18 per cent from the sale of water. After the uniting of the properties the revenue received from the sale of electricity will be 49.21 per cent and from the sale of gas 49.46 per cent, the water and steam heat branches of the business yielding 1.33 per cent.

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G. W. Ullrich Heads Empire Gas Club

Seneca Falls, N. Y.—Empire Club No. 2 of the Empire Gas & Electric Company of Seneca Falls and Waterloo has elected the following officers: President, George W. Ullrich; vice-president, Clifford Webb; secretary, C. Allison, all of Waterloo, and K. D. Carroll of Seneca Falls, treasurer. Following the election, President Ullrich outlined proposed activities of the club for the ensuing year.

A committee consisting of George Ullrich, chairman; Clifford Webb and Gilbert Morse was appointed to draft plans for the annual banquet of the club.

Some of the larger cities served by the two companies to be merged are Hammond, East Chicago, Whiting, South Bend, Mishawaka, Elkhart, Fort Wayne, Michigan City, LaFayette, Logansport, Valparaiso, Plymouth, Crawfordsville, Frankfort, Wabash and Peru.

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Western Gas Construction Co., Fort Wayne, Ind., Building New Plant

The Western Gas Construction Company has purchased a tract of land comprising about 26 acres on the main line of the Pennsylvania Railroad and are now erecting on this site a boiler shop 140 feet wide and 450 feet long. The center aisle of the building will be equipped with 15-ton cranes and the side bays with three-ton cranes.

The new shop will be fully equipped to handle all kinds of plate and structural work, either riveted or electric welded.

The Western Gas Construction Company has specialized in electric welding and has brought this process up to a very high point of efficiency.

The new shop will be modern in every detail and one of the features that has been given particular attention has been lighting and ventilation, there being over 28,000 square feet of steel window sash.

The shop is arranged to receive and store plate and structural material in one end. Laying out and fabrication of the work is so arranged to pass in a direct line from the receiving end of the building to the loading end.

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T. J. Protheroe Passes Away

T. J. Protheroe, general agent of the Southern California Gas Company, died Friday morning, January 29, at his home in Los Angeles.

Mr. Protheroe, since coming to Los Angeles 15 years ago, has continually been identified with the Southern California Gas Company, and has, more than any other one man, contributed to the application of gas to industrial uses. He was one of the first to see the possibility of applying gas to the needs of both small and large industrial organizations and he continually bore in mind the advantage to Southern California which would accrue from the use of this efficient economical power. From installations of natural gas engines for operating pumps in water systems to the use of gas as a fuel in glass and steel furnaces Mr. Protheroe was a pioneer.

He was well known in a wide circle of civic and industrial organizations on the Pacific Coast, in which he held several positions of high importance.

Standard Gas & Electric Company and its operated public utility companies comprise one of the large public utility organizations in the United States, embracing the operation, management and engineering of utility properties. The present operated public utility companies furnish electric power and light, gas, steam heat, telephone, water or street railway service in important commercial, financial and industrial centers located in prosperous sections in 18 states.

The total gross earnings of the operated public utility companies for the 12 months ended November 30, 1925, were $66,541,827 and the net earnings $29,335,818.

Panama-Colon Gas Co. Now Installing 1,000,000 Foot Gas Machine at Chorillo

The Panama division of the Panama-Colon Gas Company has just received from San Francisco a new million-foot gas machine. This machine, which they are now installing at their plant in Chorillo, is, in so far as the science of oil gas manufacture is concerned, the last word in efficient oil gas manufacturing apparatus.

The machine is operated from a central control board—direct operation being obtained by levers controlling oil and steam valves, while distant operation is effected by hydraulic control valves. The machine is known as the Jones Improved Oil Gas Set, and is of the type which is in common use in California. This machine was ordered by S. P. Vecker, the company's vice-president during his trip to California last August.

Charles O. S. Howard, superintendent of the Panama division, is in active charge of the construction work. Mr. Howard has had 14 years of experience in the gas profession and was, previous to his coming to Panama, connected with the Hartford Gas Company, Hartford, Conn., in the capacity of assistant superintendent of plant. Mr. Howard is being assisted in his work by H. T. Kirkpatrick, plant superintendent, who is a graduate of the mechanical engineering department of the Oregon Agricultural College, and who has, until recently, been plant engineer for the Portland Gas & Coke Company of Portland, Oregon. It is expected that the construction work on this machine will be finished during the last week in March.

Contracts Awarded

The Jersey Central Power & Light Corporation has adopted the Pier Process in the operation of carburetted water gas apparatus at the Long Branch, N. J., plant, and has given the contract to the U. G. I. Contracting Co. to install the Pier Process.

With the aid of this process, soft coal can be advantageously used in place of the other fuels and satisfactory results and efficiencies have been obtained.

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The fame of the Chrisman Cycle as applied to carburetted water gas apparatus continues to spread and the plants now using it report generally an increase in capacity by its use of about 10 per cent of former set ratings. Likewise, the fuel results are being correspondingly bettered.

One of the latest companies to contract for the Chrisman Cycle is the Dover Gas Light Co., of Dover, Delaware, which has given the U. G. I. Contracting Co., of Philadelphia, orders to install the cycle on all of the carburetted water gas apparatus in its plant.

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Consumers Gas Co. Awards Contract

Metuchen, N. J.—The Consumers Service Corporation, a reorganized company from the Consumers Gas Company, which two years ago abandoned their gas station, has resumed operations. A contractor from Leonardo has been awarded the erection of the gas station.